Puget Sound Gateway Program SR 167 and SR 509

Joint Executive Committee October 13, 2016

ROGER MILLAR, PE, AICP CRAIG J. STONE, PE STEVE FUCHS, PE OMAR JEPPERSON, PE SECRETARY OF TRANSPORTATION
GATEWAY PROGRAM ADMINISTRATOR
SR 167 PROJECT MANAGER
SR 509 PROJECT MANAGER



Welcome and Introductions

CRAIG J. STONE, PE GATEWAY PROGRAM ADMINISTRATOR



Agenda

- Welcome & Introductions
- Review Executive Committee Charge
- Program Overview
- SR 167 and SR 509 Project Updates
- Discussion
- Funding and Phasing
- Grant Opportunities
- Break
- Load the Bus!

Puget Sound Gateway Program - SR 509 & SR 167



- Completing the Gateway Program provides more direct links from the state's largest ports to the distribution centers in the region and to Eastern Washington
- Provides direct access to Seattle-Tacoma International Airport from the south for both passenger and air cargo
- Supports community and economic development

Puget Sound Gateway Travel Patterns Trips using SR 509 and SR 167 after extensions are complete

Context for the Program



- Comprehensive Plans
- **Urban and Manufacturing Industrial Centers**
- Forecasted travel patterns 2025 & 2045
- Input from stakeholders
- Practical design process



Executive Committee Charge

ROGER MILLAR, PE SECRETARY OF TRANSPORTATION



Legislative Direction

In making budget allocations to the Puget Sound Gateway project, the department shall implement the project's construction as a single corridor investment.

The department shall develop a coordinated corridor construction and implementation plan for SR 167 and SR 509 in collaboration with affected stakeholders.

Specific funding allocations must be based on where and when specific project segments are ready for construction to move forward and investments can be best optimized for timely project completion. Emphasis must be placed on avoiding gaps in fund expenditures for either project.

Practical Design

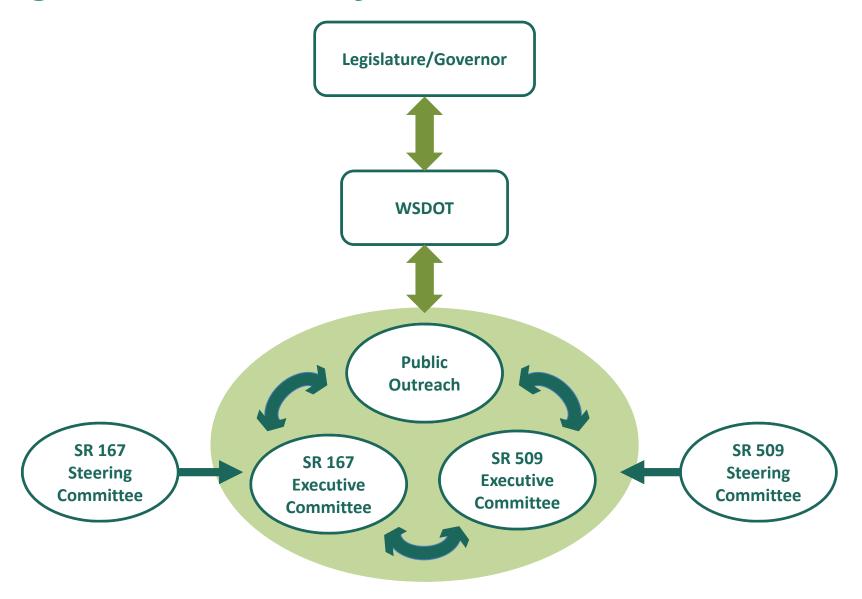
WSDOT Executive Order 1096:

- WSDOT will design transportation infrastructure related solutions that are targeted to **address the essential needs of a project, not every need.** In doing so, designs are developed with criteria that achieve stated performance for the least cost...

ESHB 2012:

- (1)(a) For projects identified as Connecting Washington projects...The legislature encourages the department to continue to institutionalize innovation and collaboration in design and project delivery with an eye toward the most efficient use of resources. In doing so, the legislature expects that, for some projects, costs will be reduced during the project design phase due to the application of practical design

Puget Sound Gateway Process



Gateway Executive Committee Charter

- Provide WSDOT with strategic advice on key decisions to implement the SR 167 and SR 509 projects within the Puget Sound Gateway Program framework
- Review and provide feedback on prioritizing needs and refinements to SR 167 and SR 509 project design concepts
- Review and provide feedback on program construction phasing
- Review and provide feedback on program funding strategies
- Collaboratively engage among the joint Executive Committee members to build consensus with affected stakeholders on a coordinated Gateway program funding, construction and implementation plan
- Assist in building/maintaining local and regional consensus for the Gateway program

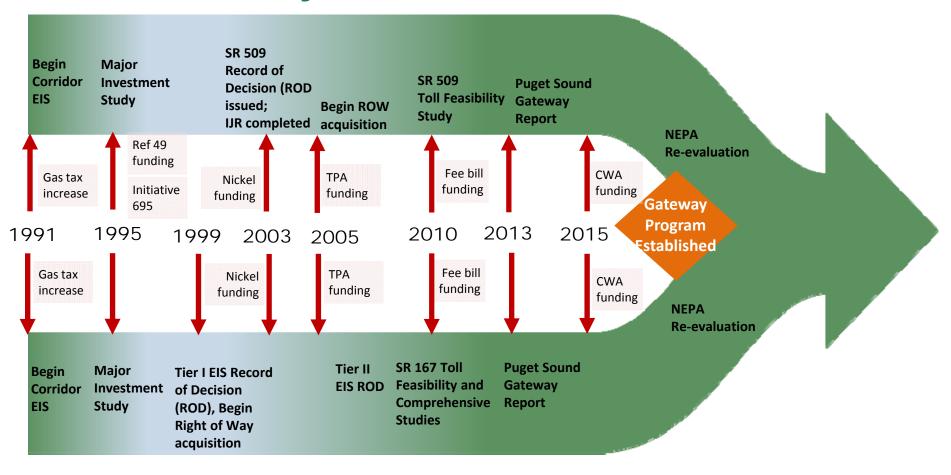
Puget Sound Gateway Program Guiding Principles

- Support regional mobility to provide efficient movement of freight and people
- 2. Improve local, regional, state and national economic vitality
- 3. Provide a high level of safety
- 4. Support local and regional comprehensive land use plans
- Minimize environmental impacts and seek opportunities for meaningful improvements
- 6. Create solutions that are equitable, fiscally responsible, and allow for implementation over time
- 7. Support thoughtful community engagement and transparency

Program Overview

CRAIG J. STONE, PE GATEWAY PROGRAM ADMINISTRATOR

SR 509 History



SR 167 History



Puget Sound Gateway Program Legislative Schedule

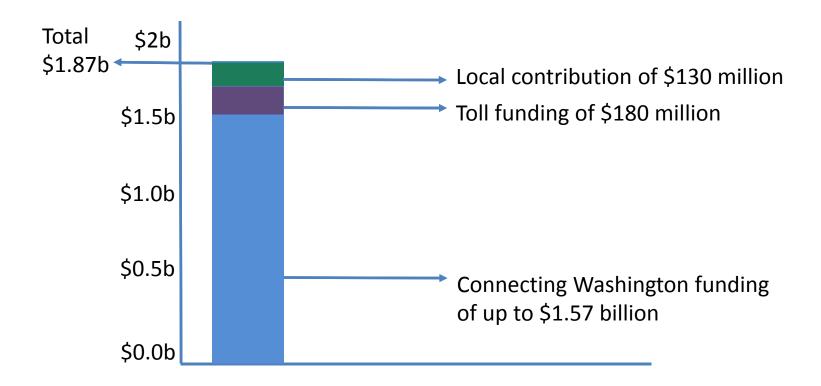
Puget Sound Gateway projects (SR 167 and SR 509) are funded on a 16-year timeline

Total cost of the Puget Sound Gateway Report recommendation was \$3 billion



Puget Sound Gateway Program

Total funding is \$1.87 billion; this amount assumes \$310 million local match and tolling funding.

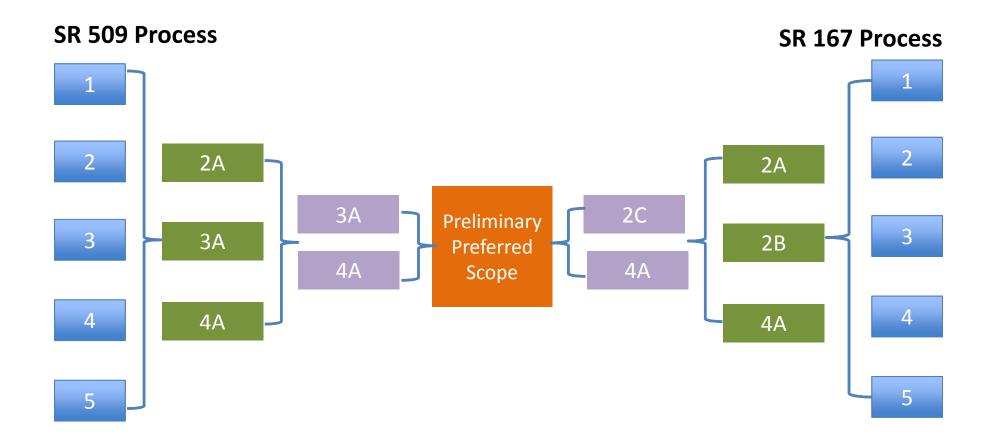


Joint Steering Committee Work Plan

December 2015



Scenario Refinement Process



Performance Metrics - Essential

Scenarios were evaluated using the following performance metrics.

SR 167 Performance Metrics	SR 509 Performance Metrics
SR 167 Performance	SR 509 Performance
I-5 Performance	I-5 Performance
SR 509 Spur Performance	
Delay	Delay
	Airport Travel Time & Travel Time Reliability
Centers Travel Time & Travel Time Reliability	Centers Travel Time & Travel Time Reliability
Complete Freeway Network/Redundancy Achieved	
Economic Benefit	Economic Benefit
Local and Regional Comprehensive Plans	Local and Regional Comprehensive Plans
Safety	Safety

Performance Metrics - Contextual

Scenarios were evaluated using the following performance metrics.

SR 167 Performance Metrics	SR 509 Performance Metrics
Number of Crossings	Number of Crossings
Continuity and Consistency of Pedestrian Facility	Continuity and Consistency of Pedestrian and Bicycle Facilities
Sensitive Area Impact	Sensitive Area Impact
Forward Compatibility	Forward Compatibility
Right of Way Impact	Right of Way Impact
Compatibility with Transit Long Range Plans	Sound Transit Federal Way Link Extension Compatibility
	Improve Intermodal Relationships between the SeaPort, Airport and Manufacturing/Industrial Centers
	Support Multimodal Choices to Airport and Kent/Des Moines Light Rail Station

Key Questions

Program Level

- 1. How many lanes are included on SR 167 and SR 509?
- 2. What level of tolling is considered?
- 3. How are lanes managed?
- 4. What degree of forward compatibility should be included in the design?

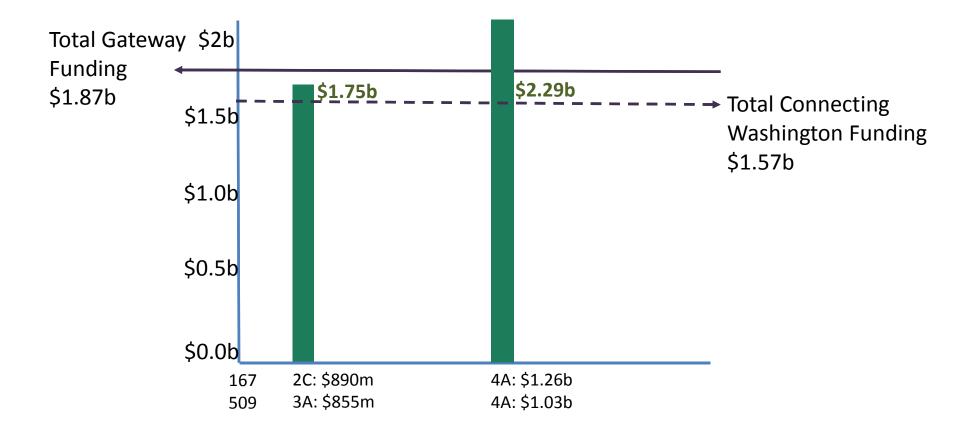
Project Level

- 5. Degree of potential impact to I-5?
- 6. Where are connections most important?
- 7. How is south access to the airport accommodated? (SR 509)
- 8. How is access to the Port of Tacoma best accommodated? (SR 167)

Program Key Questions

- 1. How many lanes are included on SR 167 and SR 509?
 - Four lanes
- 2. What level of tolling is considered?
 - Tolling will be part of the program
- 3. How are lanes managed?
 - No freight lanes
 - No express toll lanes
 - No HOV lanes

Planning Level Cost Review



SR 167 Project Update

STEVE FUCHS, PE SR 167 PROJECT MANAGER



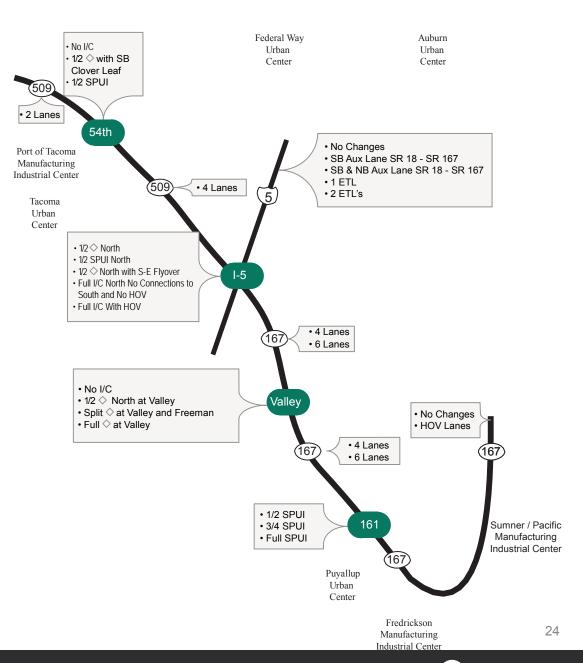
SR 167 Overview

- Completing State Route 167
 provides a more direct link from
 the Port of Tacoma to the
 distribution centers in the region
 and to Eastern Washington, thus
 improving economic vitality
- Relieves congestion on local streets & improves safety
- Supports local & regional comprehensive planning
- Improves system continuity & regional mobility



SR 167

Studied scenarios that ranged from "Closing the Gap" to "Full-Build Out +"



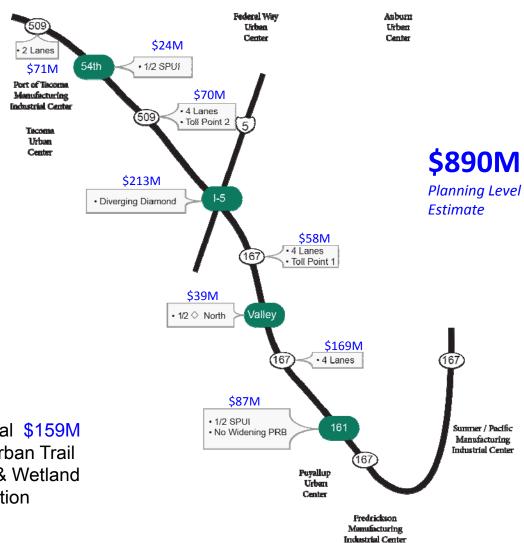
Scenario 2C: Full Connectivity at I-5 with Split Diamond Interchange at Valley Avenue and Meridian Avenue



Scenario 2C: Full Connectivity at I-5 with Split Diamond Interchange at Valley Avenue and Meridian Avenue

Highlighted features:

- ½ SPUI at 54th Ave interchange
- Service level Diverging Diamond interchange at I-5
- ½ Diamond interchange at Valley Avenue
- ½ SPUI interchange at Meridian Avenue



Other Items Total \$159M

- Interurban Trail
- RRP & Wetland Mitigation

Scenario 4A: Moderate Connectivity at I-5 with Full Connectivity at Meridian Avenue



Example of a Diverging Diamond



https://www.youtube.com/watch?v=5gLxlXamhgY



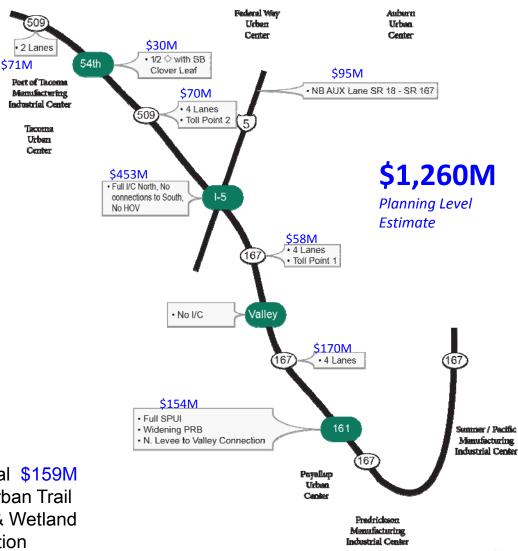
Scenario 4A: Moderate Connectivity at I-5 with Full Connectivity at Meridian Avenue

Highlighted features:

- ½ Diamond with SB cloverleaf at 54th Ave interchange
- System level interchange to\from the north at I-5
- NB I-5 auxiliary lane
- No interchange at Valley Avenue
- Full SPUI at Meridian interchange
- Widen NB Puyallup River Bridge
- N. Levee to Valley Connector

Other Items Total \$159M

- Interurban Trail
- RRP & Wetland Mitigation





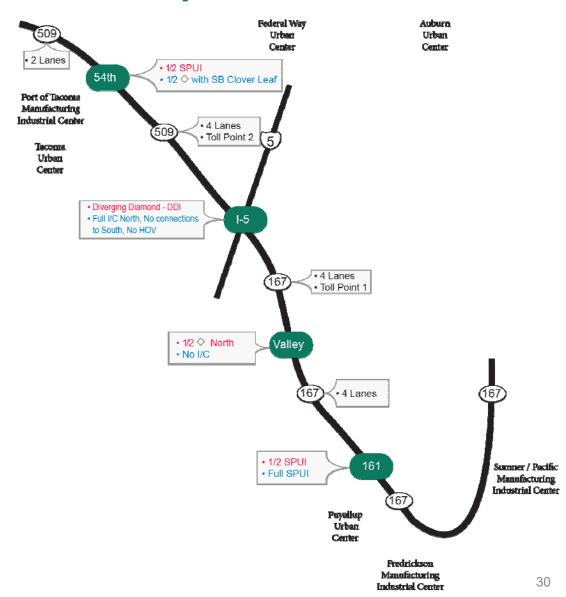
Scenario 2C/Scenario 4A Comparison

Legend:

Scenario 2C

Scenario 4A

Shared Component





Key Questions

Program Level

Project Level

- 1. How many lanes are included on SR 167 and SR 509?
- 2. What level of tolling is considered?
- 3. How are lanes managed?
- 4. What degree of forward compatibility should be included in the design?

5. Degree of potential impact to I-5?

- 6. Where are connections most important?
- 7. How is south access to the airport accommodated? (SR 509)
- 8. How is access to the Port of Tacoma best accommodated? (SR 167)

SR 509 Project Update

OMAR JEPPERSON, PE SR 509 PROJECT MANAGER

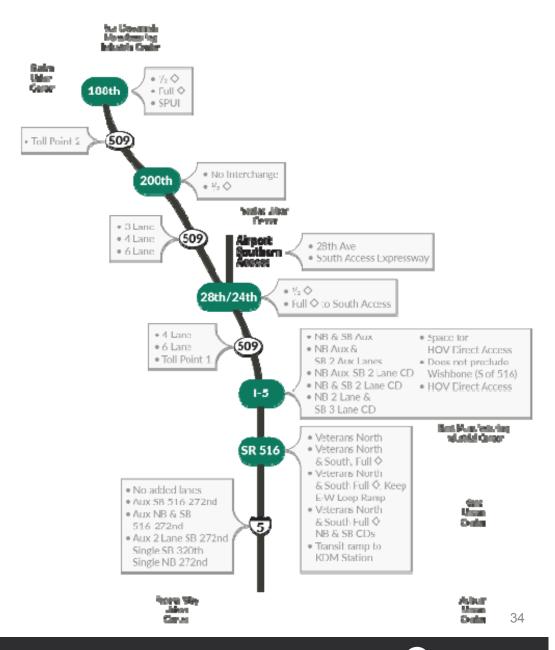
SR 509 Overview

- SR 509 improves transportation connections between urban and manufacturing centers in south King County for people and goods
- Provides south access to airport for passengers and air freight
- Adjacent Sound Transit and King County trail projects are moving forward with designs that are dependent on the SR 509 footprint



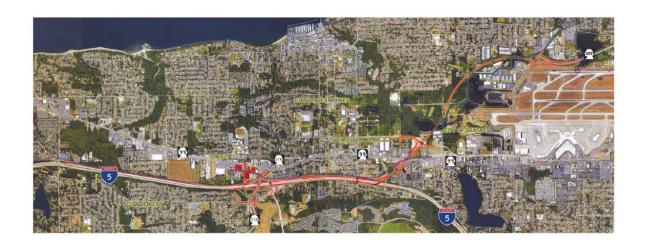
SR 509

Studied scenarios that ranged from "Closing the Gap" to "Full-Build"





Scenario 3A



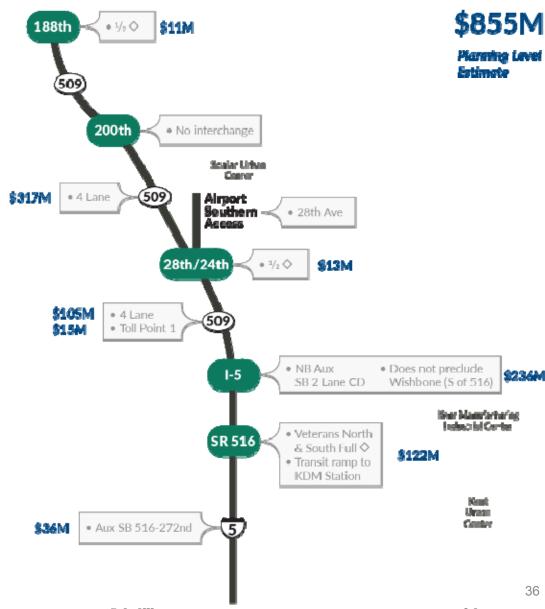
Scenario 3A

Highlighted features:

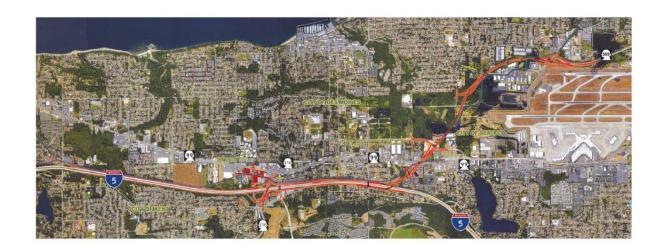
- Half diamond at 188th
- Half diamond at 28th/24th
- I-5 improvements include a northbound auxiliary lane and a southbound two lane collector/distributor road
- Rebuilds SR 516 into a full diamond interchange & provides access to Veterans Dr from the north and south
- Transit ramp provided to Kent/Des Moines Station
- Southbound auxiliary lane from SR 516 to 272nd



Raien Urten



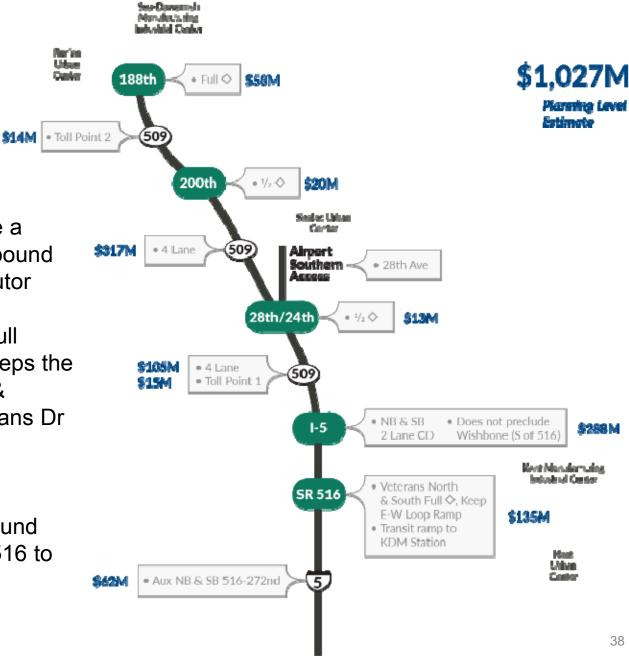
Scenario 4A



Scenario 4A

Highlighted features:

- Full diamond at 188th
- Half diamond at 200th
- Half diamond at 28th/24th
- I-5 improvements include a northbound and a southbound two lane collector/distributor road
- Rebuilds SR 516 into a full diamond interchange, keeps the SE quadrant loop ramp & provides access to Veterans Dr from the north and south
- Transit ramp provided to **Kent/Des Moines Station**
- Northbound and southbound auxiliary lanes from SR 516 to 272nd



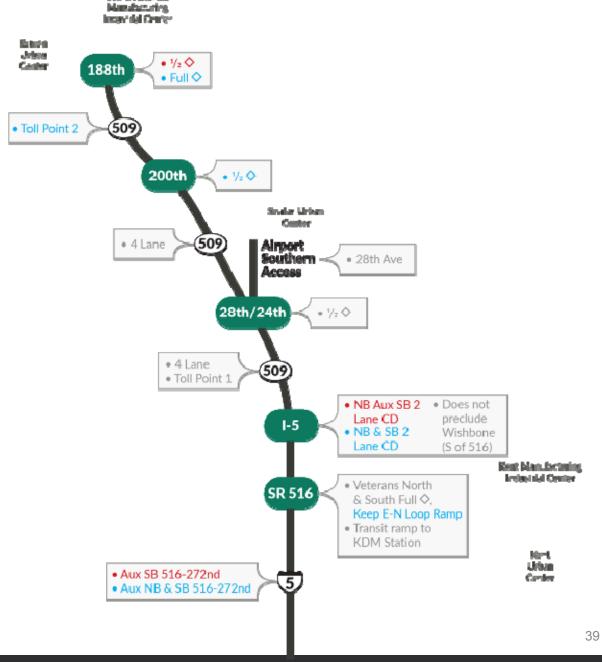
Scenario 3A/4A

Legend:

Scenario 3A

Scenario 4A

Shared Component





See Ouwarthin

Key Questions

Program Level

- 1. How many lanes are included on SR 167 and SR 509?
- 2. What level of tolling is considered?
- 3. How are lanes managed?
- 4. What degree of forward compatibility should be included in the design?

Project Level

- 5. Degree of potential impact to I-5?
- 6. Where are connections most important?
- 7. How is south access to the airport accommodated? (SR 509)
- 8. How is access to the Port of Tacoma best accommodated? (SR 167)

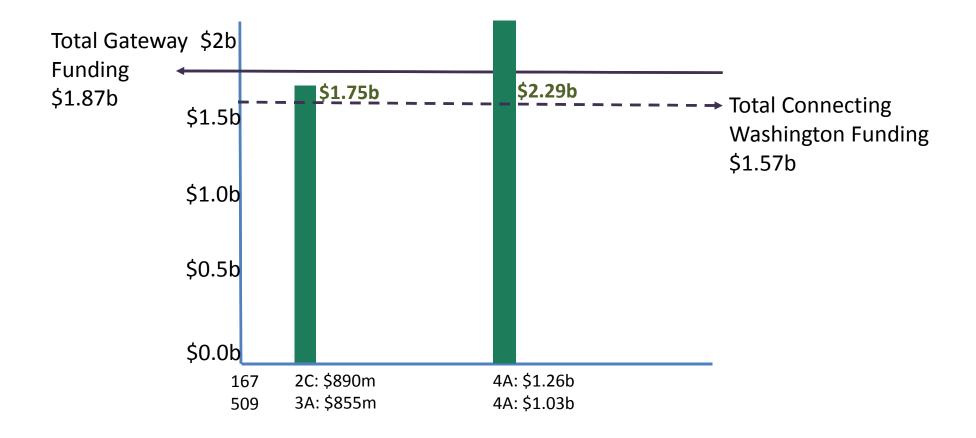
Discussion



Funding and Phasing

CRAIG STONE, PE GATEWAY PROGRAM ADMINISTRATOR

Planning Level Cost Review



Gateway Funding

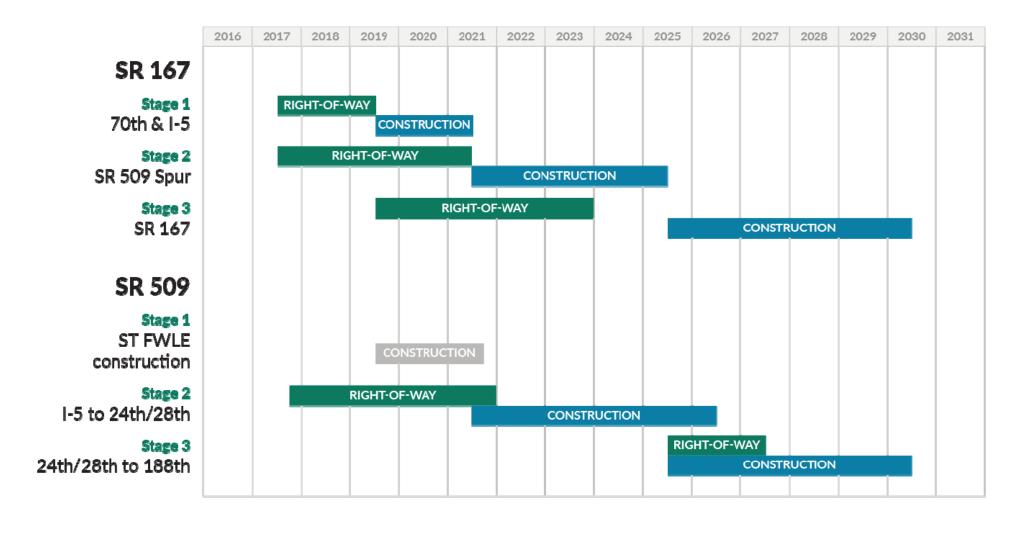


Local Funding

Toll Funding



Preliminary Gateway Construction Staging



FASTLANE Grants

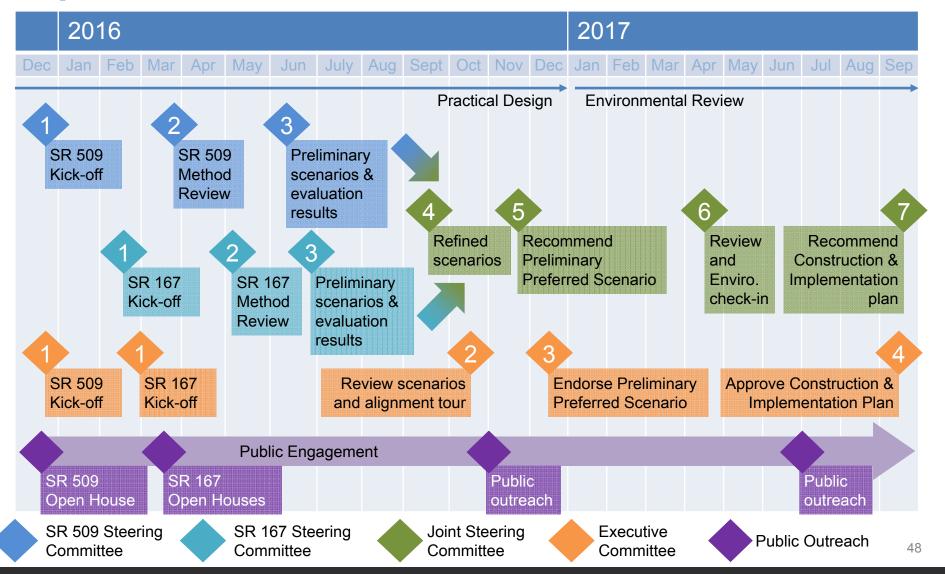
- New Federal grant program focused on freight projects
- \$4.5B authorized through 2020 (about \$1B/year)
- \$800M awarded in 2016 to 18 Recipients (212 applications received totaling almost \$10B)
 - South Lander Street Grade Separation (Seattle) -\$45M of \$140M
 - Strander Boulevard Extension (Tukwila) \$5M of \$38M
- Grant pursuit questions:
 - Who?
 - When?
 - How Much?

2016 FASTLANE Grants

State	Project	Project Size	Grant Amount	Project Cost	Share
VA	Atlantic Gateway	Large	\$165M	\$905M	18%
DC	Arlington Memorial Bridge	Large	\$95M	\$166M	54%
ОК	US 69/75 Bryan County	Large	\$62M	\$120.6M	51%
LA	I-10 Freight CoRE	Large	\$60M	\$193.5M	31%
AZ	Interstate 10	Large	\$54M	\$157.5M	35%
CA	SR 11 Segment 2 & SB Connectors	Large	\$49M	\$172.2M	29%
WA	South Lander St	Large	\$45M	\$140M	32%
GA	Port of Savannah	Large	\$44M	\$126.7M	35%
MA	Conley Terminal Intermodal Imp.	Large	\$42M	\$102.9M	41%
WI	I-39/90 Corridor	Large	\$32M	\$1,195.3M	3%
NY	I-390/I-490/Rt. 31 Interchange	Large	\$32M	\$162.9M	20%
WA	Strander Blvd Ext & Grade Separation	Small	\$5m	\$38M	13%
Total for 18 FASTLANE Projects			\$759.2M	\$3,612.4M	21%

Note: Does not show 6 smaller projects that received grants

Program Schedule to Construction and Implementation Plan





Public Outreach

- Open Houses held on both corridors in conjunction with first Executive and Steering committee meetings
 - Attendees were primarily comprised of nearby property owners
 - Heard some concern regarding tolling

Next Steps:

- Stakeholder interviews in north Pierce and south King counties
- Develop plan for increased engagement opportunities to maximize participation
- City council presentations



Next Steps

- Steering Committee will recommend a preliminary preferred scenario on November 15th
- Executive Committee meeting in December to endorse the preliminary preferred scenario
- Brief legislature during the next session regarding our work

More information:

Craig J. Stone, PE
Puget Sound Gateway Program Administrator
(206) 464-1222
stonec@wsdot.wa.gov